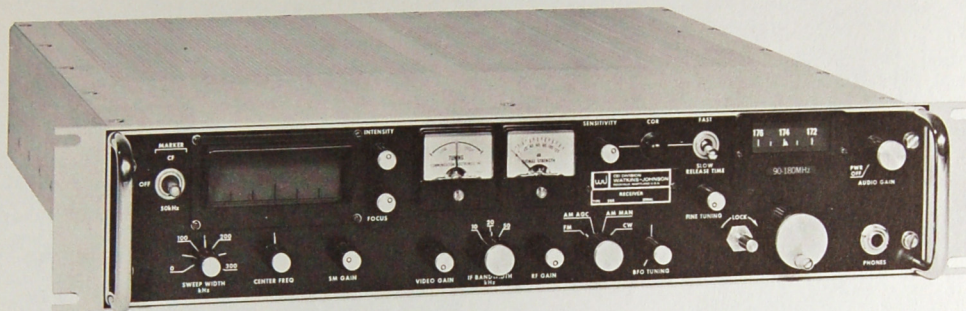


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### RECEIVER TYPE 555



### FEATURES

The CEI Type 555 Receiver provides AM, FM and CW reception in the 90 to 180-MHz frequency range. It is a dual conversion unit with a first IF of 21.4 MHz for high image rejection and a second IF of 455 kHz. Three IF bandwidths may be selected by means of a front-panel switch: 10 kHz, 20 kHz, or 50 kHz. A built-in signal monitor with a maximum sweep width of 300 kHz and a resolution of 2.5 kHz is provided. The signal monitor has a three-position marker switch which provides for marker off, a center-frequency marker to indicate the center of the IF passband, and markers every 50 kHz on both sides of the center-frequency marker. Other features of the 555 include a carrier operated relay (COR) and an independently variable beat frequency oscillator (BFO). A steel tape dial is used to indicate the frequency to which the receiver is tuned. The receiver's 90-MHz tuning range is spread over 26 inches of tape for each of readability and resetability.

Provision is made to operate the 555 with an external counter (see data sheet 723.20, DRO-302A) which gives a six digit Nixie display of the frequency to which the receiver is tuned. Thus, the frequency can be read within  $\pm 1$  kHz over the entire tuning range. The counter contains a DAFC (digital automatic frequency control) circuit which permits locking the receiver's local oscillator to the counter in 1-kHz increments. When used, the DAFC circuit counteracts local oscillator drift, resulting in the receiver's stability approaching that of the counter's extremely accurate reference source.

### SPECIFICATIONS

Tuning Range . . . . .	90-180 MHz in one band
Types of Reception . . . . .	AM, FM, and CW
IF Bandwidths . . . . .	10 kHz, 20 kHz, and 50 kHz
Noise Figure . . . . .	6 dB, maximum
Sensitivity:	
50-kHz Bandwidth . . . . .	AM: 1.4- $\mu$ V input modulated 50% by 1-kHz tone produces 10 dB (s plus n)/n, minimum
	FM: 2.2- $\mu$ V input modulated at 1-kHz rate with 17-kHz deviation produces 21 dB (s plus n)/n, minimum

20-kHz Bandwidth . . . . .	AM: 0.9- $\mu$ V input modulated 50% by 1-kHz tone produces 10 dB (s plus n)/n, minimum FM: 1.7- $\mu$ V input modulated at 1-kHz rate with 7-kHz deviation produces 21 dB (s plus n)/n, minimum
10-kHz Bandwidth . . . . .	AM: 0.62- $\mu$ V input modulated 50% by 1-kHz tone produces 10 dB (s plus n)/n, minimum FM: 1.1- $\mu$ V input modulated at 1-kHz rate with 3.5-kHz deviation produces 21 dB (s plus n)/n, minimum
Image Rejection . . . . .	65 dB, minimum
IF Rejection . . . . .	90 dB, minimum
Local Oscillator Output . . . . .	50 mV, minimum, into 50-ohm load
Local Oscillator to Antenna Conduction . . . . .	10 $\mu$ V, maximum
IF (Predetection) Output . . . . .	10 mV, minimum, into 50-ohm load for input signal levels above AGC threshold
Output Stability with AGC:	
50-kHz Bandwidth . . . . .	AM: Output varies less than 4 dB for input signal range of 2.0 $\mu$ V to 100 mV. FM: Output varies less than 2 dB for input signal range of 1 $\mu$ V to 100 mV.
20-kHz Bandwidth . . . . .	AM: Output varies less than 4 dB for input signal range of 1.4 $\mu$ V to 100 mV.
10-kHz Bandwidth . . . . .	AM: Output varies less than 4 dB for input signal range of 0.9 $\mu$ V to 100 mV
Video Output Level . . . . .	2 volts, rms, minimum, across 100-ohm load
Video Frequency Response . . . . .	Within 3 dB from 20 Hz to 25 kHz (50 kHz bandwidth)
Audio Output . . . . .	100 mW, minimum, into 600-ohm load or headphones
Audio Frequency Response . . . . .	Within 3 dB from 100 Hz to 20 kHz (50 kHz bandwidth)
BFO Range . . . . .	$\pm$ 6 kHz, minimum
AFC Capability . . . . .	Externally controlled
Signal Monitor Section:	
Sweep Width . . . . .	0 to 300 kHz
Resolution . . . . .	2.5 kHz
Sweep Rate . . . . .	22.5 Hz, nominal
Flatness of Response . . . . .	$\pm$ 1 dB
Input Power Required . . . . .	115 or 230 Vac, 50-400 Hz
Power Consumption . . . . .	16 watts
Weight . . . . .	18 lbs., approximately
Dimensions . . . . .	3.5 inches high, 17.5 inches deep, and 19 inches wide

PRICE: \$3,400.00

FOB Rockville, Maryland. Taxes extra where applicable.

Please contact us or our representative in your area for further information. Specifications and prices subject to change without notice